

CLAIMS

1. A material kit for laser welding, which is used for laser-welding a first resin member non-absorptive to laser light and a second resin member absorptive to laser light by overlapping said two resin members and irradiating laser light from said first resin member side, the material kit comprising a first resin material for forming a first resin member and a second resin material for forming a second resin member, wherein the first resin material comprises a first resin and a crystal nucleating agent or a resin having a crystallization accelerating effect on the first resin, and the second resin material comprises a second resin and an additive absorptive to laser light.

15 2. The material kit for laser welding as claimed in claim 1, wherein each of the first resin and the second resin is a polyamide.

20 3. The material kit for laser welding as claimed in claim 1, wherein each of the first resin and the second resin is polyamide 11 and/or polyamide 12.

25 4. The material kit for laser welding as claimed in any one of claims 1 to 3, wherein the content of the crystal nucleating agent is from 0.001 to 5 parts by weight per 100 parts by weight of the first resin.

5. The material kit for laser welding as claimed in any one of claims 1 to 3, wherein the content of the resin having a crystallization accelerating effect on the first resin is from 1 to 20 parts by weight per 100 parts by weight of the first resin.

30 6. The material kit for laser welding as claimed in any one of claims 1 to 4, wherein the crystal nucleating agent is talc.

35 7. The material kit for laser welding as claimed in claim 3, wherein the resin having a crystallization accelerating effect on the first resin is polyamide 6 and/or polyamide 66.

8. The material kit for laser welding as claimed

in any one of claims 1 to 7, wherein the first resin member further comprises an additive weakly absorptive to laser light.

9. A method for laser welding resin members,  
5 comprising overlapping a first resin member non- absorptive to laser light and a second resin member absorptive to laser light, and irradiating laser light from said first resin member side, thereby laser-welding said two resin members, wherein the first resin member 10 comprises a first resin and a crystal nucleating agent or a resin having a crystallization accelerating effect on the first resin, and the second resin material comprises a second resin and an additive absorptive to laser light.

10. The method for laser welding resin members as  
15 claimed in claim 9, wherein the first resin and the second resin each is a polyamide.

11. The method for laser welding resin members as claimed in claim 9, wherein the first resin and the second resin each is polyamide 11 and/or polyamide 12.

12. The method for laser welding resin members as claimed in any one of claims 9 to 11, wherein the crystal nucleating agent is talc.

13. The method for laser welding resin members as claimed in claim 11, wherein the resin having a crystallization accelerating effect on the first resin is polyamide 6 and/or polyamide 66.

14. An article comprising the resin members welded by the laser welding method claimed in any one of claims 9 to 13.